



GEO. H. LEE

Lee's Chicken Talk

A DISJOINTED
TREATISE ON
POULTRY TOPICS

BY
**GEO. H.
LEE**
OF OMAHA

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WM. SIM DRUG CO.
OMAHA, NE.



INTRODUCTION

IT IS almost twenty-five years since I first became interested in poultry and to that first experience the world owes such value as it may have received from the Lee line of poultry supplies. I am telling this tale to convey what information and advice it may bring to others engaged in similar work or in contemplation of similar work.

As an instance of how **Little Things** will grow into big things and change the whole course of one's life I want to mention what started me in the chicken business. It was nothing more or less than **bad store eggs**.

As customary in many small towns, and especially in those days, merchants simply passed eggs over the counter as taken in from the farmer customer and without candling or other knowledge of their freshness. Sometimes they were fresh—sometimes very “unfresh.”

Now I do not know of anything that makes a housewife quite so provoked and angry as to break a dozen eggs to get three or four good ones for dinner. It was an experience such as that which led to the purchase of a dozen Plymouth Rock hens and their installation as egg-producers for the Lee family.

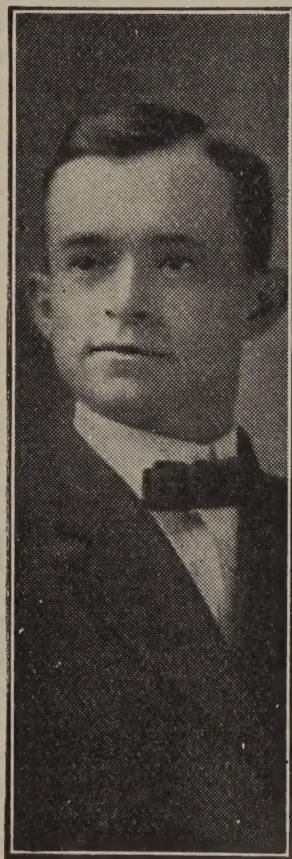
I never start in at anything in a half-hearted way and I was soon a poultry crank of the first water. I gained a reputation as a poultry breeder in a couple of years and even before that time I was penning interesting items for the poultry press that were eagerly sought after and regarded as words of wisdom by the more recent amateur. I often look back now at the stuff I wrote at that time and wonder how it was ever permitted.

Well, I did learn a few things. I saw defects in management. I observed a few successes and more numerous failures in the chicken business, but somehow I managed to make money with my birds, though handled on an ideal and expensive scale.

The few things I learned at first, for instance Lee's Lice Killer and Lee's Germozone, on being offered to the public quite revolutionized poultry raising in certain sections of the country and became so important and interesting to me that I had to move to the city and cut out the poultry end for the time being.

That was fifteen years ago and after a lapse of a few years I sort of got disgusted with the general idea that Lee's chicken talk was theory and not practice, so I decided to start a poultry farm that would not only be a money-maker, but also a show place for those infected with the “fever.”

I have often expressed the opinion that a poultry farm of any size could be successfully and



profitably operated if capital, facilities and attention were in proportion to the magnitude of the business. The person who starts in to handle five thousand chickens without really knowing how to properly care for a hundred is quite as certainly foredoomed to failure as is the one who tries to crowd a thousand chickens into quarters properly fitted for the accommodation of a couple of hundred. Crowding, inexperience, and working beyond the capital at hand, are the three great causes of failure in poultry work.

Several years ago I wrote a book or booklet entitled "Mandy's Poultry School" of which something over two million copies have been printed and distributed and of which, by the way, copies are still on tap for anxious amateurs, free on request. That popular little treatise went into considerable detail in describing the care of poultry on a moderate scale and my writings now and in future will pertain more to operations on a larger scale without useless repetition.

If you ever start in the chicken business make up your mind to stick to it. If you cannot manage it yourself directly, get someone to manage it who will stick to it. It don't pay to have a poultry farm with a changing manager each year.

For a long time in the establishment of a poultry farm it is all money going out and but little coming in. Unlimited capital with insufficient or improper attention is just as bad as careful work and not enough capital. The quickest progress is, of course, made when these features are in proper proportion. If one has small capital it is necessary to go ahead more slowly but with the definite purpose of increasing at least a little each year.

To those who come to me for advice I always say, "Learn to handle a hundred chickens successfully before trying a thousand." With proper stock to start with and the right kind of tools to work with, a good amount of common sense and stick-to-it-iveness, there is no business on top of the earth that is so certain of success or so definite, sure, and certain of a market as is the poultry business.

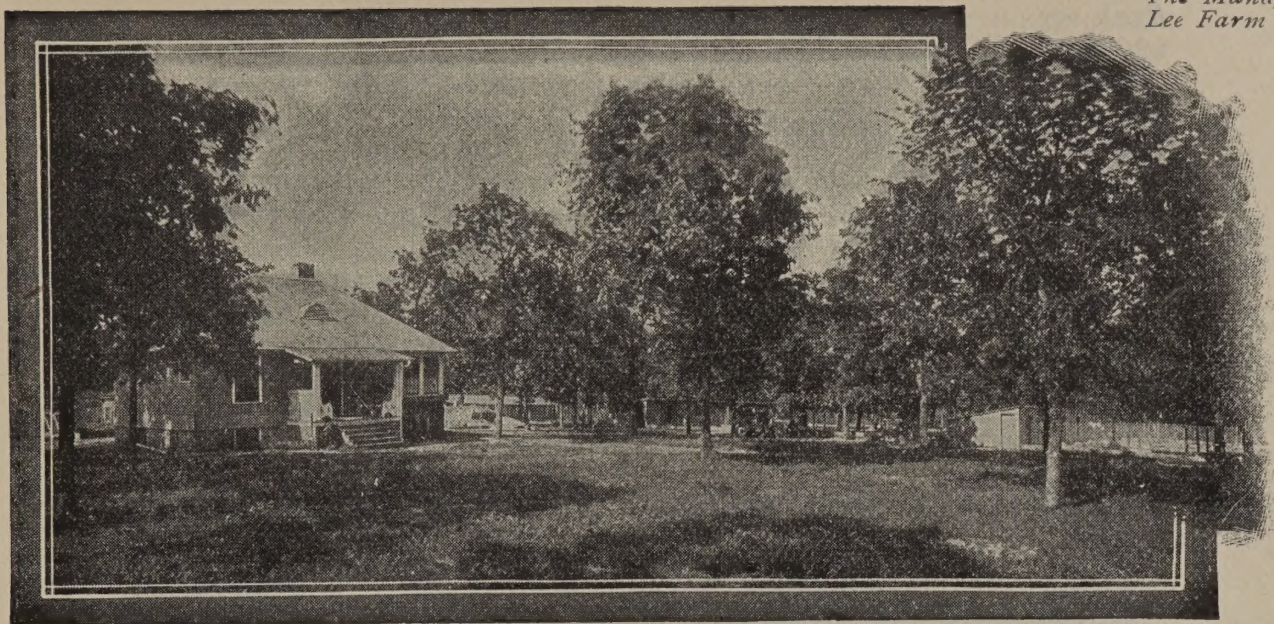
Now I want to tell you a little of how we handle the work. I can do this best by a series of short articles dealing with the different classes of work on a poultry farm and written by those actually having the work in charge.

*Yours truly,
Geo. A. Lee.*

WE WILL HAVE READY

for distribution in the near future one of the best guides in poultry work ever published.

FREE? Of course. Watch for it!



WHAT I KNOW ABOUT INCUBATORS

(By Viola E. Pettit.)

REALLY I don't think that anyone but George H. Lee would have had the nerve to install a green hand as manager of a big poultry plant. What I didn't know about chickens and incubators would fill a big, big book. I had, however, a large willingness to learn. My first few hatches were mostly mixed ones, white eggs and brown eggs together. The white eggs invariably hatched from twelve to twenty-four hours ahead of the brown ones, and I noticed that they didn't hatch as well as when all of one kind and when all popped out at once. I was also afraid of sprinkling the eggs very much as the weather was very dry and the machines running in a furnace-heated house with temperature of 70 to 80 degrees, my first few hatches didn't average much over 60 per cent. To be exact, my first seven hatches averaged just 65 per cent, or 618 chicks from 950 fertile eggs.

Perhaps, too, I was not careful enough of testing. I knew how to test out the clear, infertile eggs, but I guessed at the rest quite largely until I learned to tell the difference.

On my very first hatch I got 84 chicks out of 125 supposedly fertile eggs. I was bitterly disappointed as I was hoping and looking for a 100 per cent hatch. It was a mixed lot of whites and browns, run at 103 degrees, and sprinkled **very light** with warm water occasionally during the last week.

The next hatch I got 99 chicks from 123 eggs (another mixed lot), sprinkled eggs more than at first and thought I knew quite a lot about incubating.

My next several hatches were variable. I was running the machines upstairs in furnace-heated rooms as a matter of convenience and I can now see that I would have had much better results if I had been more liberal with that very cheap article, **water**. One particular hatch proved that to me. Seventy-three chicks only had come out of 120 eggs and the hatch seemed entirely over, but at a telephone suggestion by Mr. Lee, I took out the tray and sprinkled the remaining eggs liberally with moderately hot water. **Result:** Ten more chicks; bright ones, too.

We now moved the Incubators into the basement, using one color of eggs only in any machine: Leghorn eggs in one machine, Barred

Rock eggs in another. By this time I was running eight incubators. The white eggs I found would come off on time with at least a degree less heat than the brown eggs, so I kept the temperature at 102 degrees, 103 degrees and 104 degrees for first, second and third weeks for white eggs, and 103 degrees, 104 degrees and 105 degrees for brown eggs. By this time I was not afraid of sprinkling and as the weather was very dry I gave the eggs an occasional sprinkling during first and second weeks and a good wetting down every morning during the third week.

As a result my next eighteen hatches averaged from 80 to 90 per cent, or seventeen hundred chicks from a trifle over two thousand fertile eggs. Mr. Lee says that the incubator expert is the one who gets 80 per cent or better through the season and not the one who makes an occasional big hatch, so I felt that I was approaching the period of graduation.



*On the
Mandy
Lee
Farm*

I can see plainly now that there is no "luck" about artificial hatching when good incubators, such as the Mandy Lee, are used. The skill of the operator is confined to three things: 1st, selection of eggs; 2nd, determination of the proper degree of heat; 3rd, how much or how little moisture.

The selection of eggs is very important and as a preliminary to this should be considered the care of the breeding stock. My testing out of infertile eggs from the incubators has shown to me means of detecting many infertile eggs before putting them into the machine at all, and I now carefully cull out all of the crooked, spotted, or abnormal eggs and get a better degree of fertility.

The proper degree of heat is easily determined by observing the time of "pipping" which should be early on the twentieth day. No doubt much depends upon the altitude, the season, and other conditions. I know that at Omaha a higher temperature is needed at the upper surface of the eggs when in a cold room than when in a warm room; also that a higher temperature is needed for brown eggs than for white eggs.

As to moisture, that has now been settled, for good and for all, by the invention of the Mandy Lee Hygrometer which measures moisture

as accurately as a thermometer measures heat and renders possible easy and exact regulation.

Formerly we had to guess at moisture and were quite as apt to guess wrong as to guess right. We can see that now that we have something correct to go by. We find that in cold, damp weather we need lots of applied moisture while formerly we thought we **didn't need any** because it was damp out-of-doors. Again, in hot and apparently dry weather, we find we have plenty of moisture in the egg-chamber, although we used to think that this was the time when lots of water should be used.

It is interesting to watch the chicks pop out of the well-rotted shell when moisture has been kept at the right point all through the hatch. We have to be quite careful now in handling the eggs during the latter part of the hatch for fear of **breaking** them;—quite different from what it used to be when shells got tough and hard from lack of moisture.

Hatching now is very simple and easy compared with what it used to be when it was necessary to be an expert judge on several points in order to get even moderate hatches. Now, all one has to do is to follow simple directions, put in ten minutes with each machine night and morning, and forget about them the rest of the time.

Osola E. Pettit

BLOW YOUR OWN HORN

That's our sentiments—and here's three reasons
why we prefer the Leghorn variety:

1. Because they have in consecutive tests in Australia and other egg-laying contests proved the best all-the-year-round layers, and the egg market in our opinion has the best future of anything along the produce line.

2. They are great foragers and their feeding cost is not more than half that of any of the larger fowls—an important item in these days of high prices.

3. The producing cost of the Leghorn variety is low compared to that of other birds. For instance, at the Rhode Island Experimental station Leghorn eggs were produced at 8c a dozen as against 12c for those of heavier breeds.

Other reasons equally as good could be given substantiating our claim that the Leghorn is "the best," but we do not believe more are needed. The above are sufficient reasons for us. No; the Leghorn is not, strictly speaking, a table fowl, altho for table use, at a certain age, the White Leghorn has no superior.

Some or all of the above statements MAY BE questioned by over-enthusiastic breeders of other varieties, but—they're facts just the same.

Germozone



NOTHING that I have ever given to the poultry fraternity, not even excepting our first and biggest seller—Lee's Lice Killer—has given me so much cause for pride and satisfaction as **Germozone**.

Necessity is always the mother of invention and it was so in this case. In the summer of 1896 I lost fully one-half of my chicks from **Bowel Complaint** and during the following winter I lost half or more of the remainder from **Roup, Swelled Head, Canker**, etc.

I spent over a hundred dollars in various drugs, experimenting, as is always my custom, to find a remedy. I had no thought of commercial enterprise at the time and did not dream of the carloads of Germozone that we are now sending out to California, Oregon, Canada, Florida, Massachusetts and other distant points, but my whole thought was for something that would **stop my loss and cure my pets**.

I found it! The next summer my losses of chicks were **less than ten per cent** and the following winter I didn't lose a single one from Roup or Canker—**not a single one**. Others wanted the cure. I named it **Germozone**, put it up just as it is today, and it has been the wonder of the poultry world as a steady, persistent and increasing seller. From single packages it has increased in sale to **dozens**; from dozens to a **gross**, and from a gross to **carloads**. I do not believe that there is another poultry medicine in the world that sells to any one dealer in car lots.

At present we prepare our **Germozone** in large twelve-ounce bottles at **50 cents each** or in boxes of **60 tablets** (same value, for mailing) at same price.

A Wonderful Remedy

Germozone is wonderful. Almost all my chicks had the Roup and I can see the improvement already. I have been in the poultry business before and know a good thing when I see it; and must say if all your supplies are as good as the Germozone you have the best. **CHAS. SCHIERHOLZ,**
Galveston, Texas.

Strange—But True

Have used Germozone tablets and know they are worth their weight in gold to any poultry raiser.
MRS. W. A. MALONEY,
Chester, Wash.

Perfect Satisfaction

I have used Germozone for my chickens for the past year, using it for Bowel Trouble on young chicks, Liver Trouble Roup, Frosted Combs and Wattles, Canker, Sore Throat, badly bruised and inflamed Foot, and it has been the easiest applied and has given perfect satisfaction in every case.

MRS. F. E. INGRAM,
Burlington, Iowa.

For Sorehead

Have always found Germozone the thing for Sorehead
PANSY JORDAN,
Yazoo City, Miss.

Germozone Keeps Fowls Healthy.

Send me two boxes of Germozone. My dealer always seems to have something "just as good"—but not for me. I have tried practically all poultry medicines that I ever heard of and Germozone has them all beat

E. D. GARDNER,
Pittsford, New York.

One bottle of Germozone saved practically all of my young chicks from cholera. It is certainly great stuff for that disease.

F. W. EATON,
Fort Bayard, New Mexico.

Have used several boxes of Germozone and like it very much.

C. L. PEARCE,
Clerk of the Circuit Court,
Batesville, Arkansas.

I am using Germozone for my chicks which were dying with White Diarrhoea. To my great surprise and satisfaction there has been no death in my flock since the second day after I began giving Germozone.

H. W. RAPPLEYS,
Milford, Mich.

In my opinion nothing equals Germozone for roup and bowel complaint. I have tested it thoroughly and am always glad to recommend it.

T. J. WENCIKER,
Tamora, Neb.

In my opinion the poultry raiser has no better friend than Germozone. Last season it saved an entire hatch for me which otherwise I know I would have lost.

ROBERT GRIFFITH,
Jackson, Michigan.

Germozone is the best medicine I ever used either for poultry diseases or for general family use.

A. C. WIGGS,
Mapleton, Iowa.

I consider Germozone the best medicine for turkeys ever placed on the market.

MRS. D. D. MICHAEL,
Prosser, Washington.

I simply can't get along without Germozone and have found it the greatest remedy in the world for anything for which you recommend it.

MRS. J. T. DUNCAN,
Denver, Tennessee.

I am breeding the Carnoux Pigeon. The only remedy needed among this flock to prevent or cure canker or bowel trouble is Germozone. I can cure any case of canker with Pigeons by using Lee's Germozone.

LOUIS A. HART,
Weatherford, Texas.

Germozone is the finest thing for fowls, old or young, and is a sure cure for colds, swelled head, roup, etc.

MRS. J. E. SCOTT,
Peck, Kansas.

We have always found Lee's goods exactly as claimed. We have every confidence in what you say in your advertising and believe that anything said therein is a truthful statement of the merit of your goods.

MRS. HATTIE LE BLANC,
Summit, Miss.

Mr. B. Davis has 500 hens and they got the roup and it went through the whole flock; he used 8 bottles of Germozone and never lost a fowl.

WAERS & MOFFETT,
Polo, Mo.

I have used Germozone for more than three years and am confident that it is the best chicken medicine ever prepared. I am quite an experienced poultry raiser and flatter myself that my opinion is worth something.

MRS. R. F. JAMES,
Wenonda, Virginia.

After using Germozone I believe I have found a world-beater for the cure of roup. I lost my chickens previous to using your medicine, but since commencing to use it have not lost one.

LOUIS SCHMITH,
Virden, Illinois.

Germozone is the best cholera cure I ever tried.

WALTER HIPPARD,
Coulterville, Illinois.

Give it Regularly—TWICE A WEEK.

Care of Chicks

WE TAKE the chicks from the incubator when the hatch is all over and they all look dry, generally on the morning of the twenty-second day. Each chick is marked with a hole in a web of the foot and placed in the brooder, the floor of which is covered with paper and sprinkling of straw chaff.

A couple of handfuls of Grit are thrown in and a Drinking Fount filled with water to which is added a teaspoonful of Germozone to each quart of water. The Germozone is added at the very start because chicks have a tendency to drink too much water at first if placed freely before them and the Germozone cuts down this early appetite for water and prevents bowel trouble later on.

They get no food at all during the first day in the Brooder, but next morning they receive Chick Food (which is a mixture of seeds and cracked grain), a handful to about fifty or sixty chicks; then a couple more similar feeds during that day.

From the second to the seventh day the chicks are fed five times a day of chick food, giving each time what they will eat up clean except the last meal when we give a little extra so that each is certain to receive its share with some left over to start on in the morning.

Before the chicks at all times is a box each of Grit and granulated Charcoal and plenty of fresh water warmed during the cool weather. To the drinking water we invariably add Germozone **twice-a-week** for young and old chickens. The Drinking Founts are emptied and cleaned every night.

The chicks have some kind of green food before them all the time—either lettuce, cabbage, turnips, potatoes, or something of similar nature—and after the seventh day a little fresh cut bone is fed twice a week the year round.

After the seventh day, one feed a day is given of a mash composed of **two parts bran, one part shorts, and one part corn meal**, to each 100 pounds of which is added **five pounds of Lee's Egg Maker and Chick Grower** and a handful of fine grit. This is then mixed up with clabbered milk to form a thick, crumbly mash and fed in the morning each day.



At noon, small raw potatoes cut in pieces and cracked wheat, and at night cracked wheat and corn more than they will eat so that they will have some to start on first thing in the morning.

When the chicks are six weeks old we feed just the same except that we use whole wheat instead of cracked, and from this time until full maturity the feed is much the same. A mash in the morning, wheat at noon, and wheat and corn at night, with lots of fresh water, green stuff and grit. Plenty to eat but busy and active all the time. This feed will make a hen lay or a chick grow.

Great care should be exercised in seeing that no food for chicks is allowed to become musty. Musty food is death to young chicks. Many lusty flocks commence to die off mysteriously simply because of damp, infrequently cleaned feed-pans or hoppers, or on account of the food supply being kept in a damp place before or after its purchase by the owner of the chicks. **Too liberal feeding** on damp ground causes food to be left untouched for days, when it becomes musty and unfit for use.

When it is suspected that Chick Food is musty put it in a pan in the oven and **parch it**. In damp weather the feeding of parched grain is a most excellent precaution.

When Fireless or non-heated Brooders are used they should always be just comfortably filled,—neither too few nor too many. Fill the brooder with chicks fresh from the incubator; close it up tight and keep it closed for from twelve to twenty-four hours or until the chicks are at least forty-eight hours old. Then they may be let out to feed for a little while. If the brooder is kept in a cold place the chicks will stay in the brooder most of the time, running out for food and water at intervals. It is therefore advisable, for winter brooding, to keep the brooders in a room of reasonable warmth. During spring and summer they may be kept out of doors except in case of long-continued rainy weather when they should be in warm, dry quarters, indoors.

L.R. Griffis

A Lady

came into our office one day and complained that her poultry and poultry-house were overrun with vermin, and requested a remedy.

We recommended **Lee's Lice Killer**, but she hesitated, saying she had already tried three different kinds of liquid insect destroyers without success and didn't care to invest any more money in preparations of that kind.

We finally persuaded her to try our product, with the understanding that if it wasn't PERFECTLY satisfactory it wouldn't cost her a cent.

A few days later she returned saying that after the first application the roosts and dropping-boards were fairly covered with vermin, and after the second treatment she couldn't find a louse.

That proves what Lee's Lice Killer will do. We don't care what success you have had with other insect destroyers, we GUARANTEE our product to be better than any other—and to give satisfaction. All Lee's goods are sold that way.

Don't you think it's "the line to tie to?"

Houses and Yards

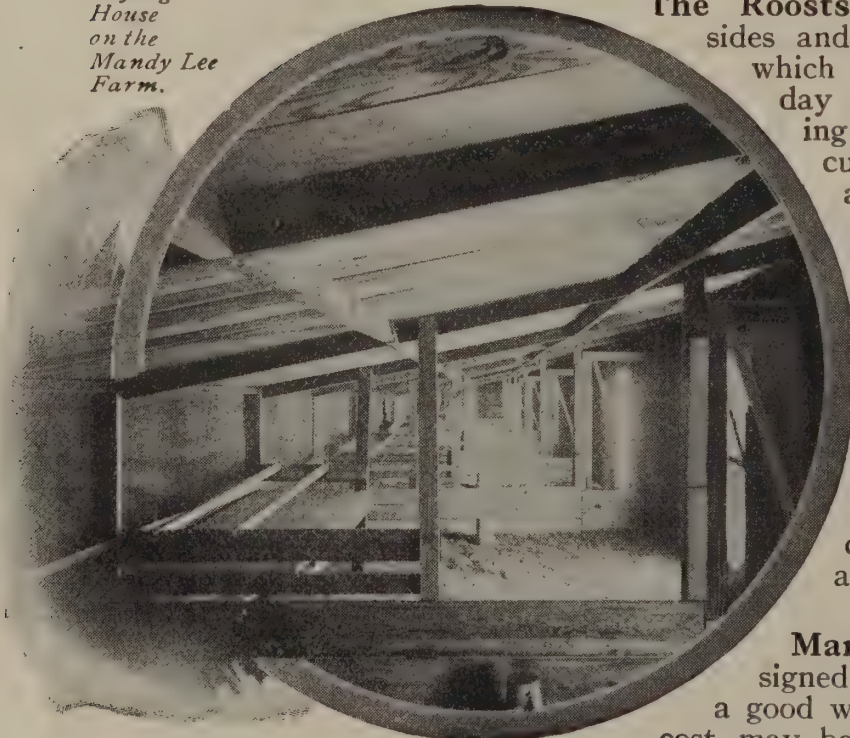
THE location of houses and yards should have careful study. Future needs should be considered as well as present needs, and buildings and yards for present use so placed as not to interfere with those to be constructed at some future time. When buildings and yards are massed closely together it gives greater economy of labor at the expense of sightliness and also with more danger of spreading of fire, epidemics, etc. As a rule both houses and yards should be laid out in liberal proportions, with an eye to plenty of room for growing or laying stock and to orderly arrangement and management.

Illustration on this page shows the interior construction of one of the Laying Houses on the Mandy Lee Farm. The Brooder House will be mentioned more fully in a separate article.

The Laying Houses are 14x100 feet in size. These are each divided into eight pens and each pen has a yard 12x50 feet in size. The roof and walls are covered with heavy tarred roofing felt, well battened down.

These houses face the south but should face the east in any situation where there is not plenty of shade. The doors in the front of each pen are simply double frames, one frame covered with wire netting and the other with oiled muslin. These answer the purpose of both door and window, no glass being needed or used in any of the houses except the Brooder House. In warm weather the muslin-covered frame can be removed from the wire-covered frame which is hinged to the house, thus the house is well open.

Laying House on the Mandy Lee Farm.



The Roosts are arranged with muslin sides and a muslin curtain in front which is kept rolled up during the day but is dropped at night during cold weather. When these curtains are down it makes a cozy, comfortable roosting place and with no danger of freezing combs and wattles even in the most severe cold weather.

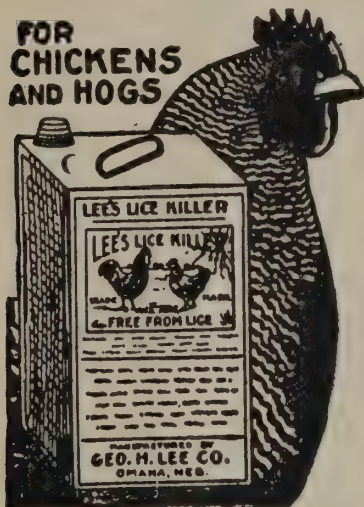
There is no floor in these houses. Fresh earth is a great deodorant and with plenty of litter will keep sweet and clean for a long time. It is desirable to change the earth in these pens at intervals.

All of the houses on the Mandy Lee Farm have been designed for economy of material and a good working value. Many times the

cost may be spent in building a poultry-house if desired, but a greater profit must be made to offset the increased cost.

Lee's Lice Killer

IN the summer of 1895 I invented Lee's Lice Killer. I haven't had much cause to write about it since as it has spread like wild-fire from coast to coast until not only carloads but trainloads constitute our shipments. At the present time, when many other liquid lice killers have appeared, I feel that I should more clearly explain the essential features of Lee's. Most every one, having a desire to imitate, on taking a whiff of Lee's Lice Killer thinks that it is merely a tar oil and, therefore, buys a barrel of tar oil, puts it up in cans, sells it as a Lice Killer guaranteed as good as Lee's.



Lee's Lice Killer is a distillate of Coal Tar and Sulphur Products. The gases, carried over at a stated temperature, are condensed into a liquid and instantly put into air-tight receptacles wherein the gas contained in the fluid is held and retained for its special insecticidal qualities.

Exactly the same fluid could be distilled and, if allowed to stand in an open tank or wooden barrel for a month, would be utterly valueless as an insecticide except by contact.

This explains why an article that looks the same and smells the same as Lee's Lice Killer does not do the same work. Lee's

Lice Killer becomes "flat" if left open or uncorked for even a few hours, just like "pop" or "ginger beer." It's the gas that counts in Lee's Lice Killer and none other can imitate it because none other is manufactured as an insecticide but simply bottled or canned later from a commercial product.

It don't require contact with the vermin for Lee's Lice Killer to kill. Painted or sprinkled on roosts or dropping-boards an hour before roosting time it kills, not only the mites or lice with which it comes in contact but also all vermin on the bodies of the chickens.



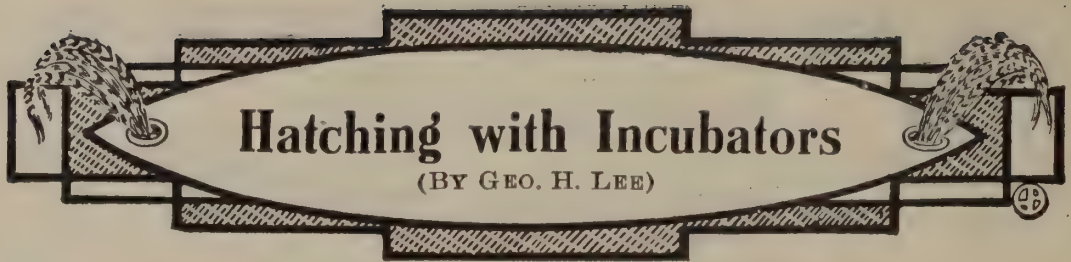
5-gallon can.....	\$4.00
1-gallon can.....	1.00
$\frac{1}{2}$ -gallon can.....	.60
$\frac{1}{4}$ -gallon can.....	.35

Lee's Lice Killer is far superior to anything that I have ever used; have been in the poultry business for a number of years, during which time I have tried practically all Insect Destroyers obtainable, but yours easily beats them all.

JOHN H. MARTIN,
Hawkinsville, Ga.

Send me another shipment of Lee's Lice Killer. It is the most effective of all insect destroyers for use in this country. MRS. E. LUDLOW,
Las Esperanzas, Mex.

I have used Lee's Lice Killer for eight years and can find no better anywhere. MRS. L. MORGAN,
Fair Play, Mo.



I T TAKES a lot of patient experiment and hard work to evolve the best hatcher. Most people, in buying an incubator, study the testimonials, not properly understanding that these are the **best** reports and **not** the **average**. Until two years ago, few incubators were capable of averaging hatches of better than **80 per cent** and most of them not better than **50 per cent** though **all of them** could produce testimonials showing **occasional 90 to 100 per cent hatches**.

I have personally operated or directed more than one thousand hatches—more, I believe, than any one else in the world. Several years ago, when my **average** results, in all sorts of weather, season, and climate, were **70 per cent or better**, I could beat any other incubator in the world in **average** results though not one of them but **claimed** to hatch every fertile egg and produced testimonials showing (occasional) **95 per cent hatches or better**.

I found that incubator results were dependent too much upon **outside** conditions. If the weather was all right and everything else was all right, there would be a good hatch. If any of the **outside** conditions happened to be **wrong** the result would be comparative failure.

All at once it occurred to me to entirely **disregard** conditions **outside** the incubator and have conditions right **at the eggs**. I have had enough experience in electrical, chemical and mechanical work to know that the same conditions will always produce the same results. If I measure and regulate everything that has to do with artificial incubation and get the same conditions **for the eggs** every time I will always get the same results.

This led to a study of what was necessary in making a hatch. The conclusion reached was—proper proportions of **Heat, Moisture and Air Movement** or ventilation. This led to the development of heat distribution, moisture measurement and regulation, and the uniform passage of air through the egg-chamber. Heat regulation has long since been reduced to a science and it is unimportant. Regularity of heat cannot compare with the other requirements above named. The old hen will vary in temperature of the eggs under her body more than seven degrees but she always gives them the same turning, moisture and air-change or **ventilation**.

I first devised a system of turning or stirring the eggs that would properly copy the work done by a motherly old hen; then I completed a modern system of **ventilation**. All that remained was measurement and regulation of **moisture**, but that was a "sticker." There was no known instrument that would correctly measure air humidity in a temperature as high as that of an incubator so I had to invent one of my own. The **Mandy Lee Hygrometer** is the result and it is simply perfection in its work and in its results. It practically closes the last chapter of incubator experiment and places the whole upon a **safe, scientific basis**.

It is an undoubted fact that like conditions will always produce like results. Guesswork conditions can only produce **variable** results. If you buy an incubator, get one that shows, **not** the highest **occasional** results, but the biggest **average** results. An incubator show-

ing a hundred testimonials of 100 per cent hatches may be the very worst for you to buy. It may not **average** more than **50 per cent** during different seasons and under different conditions of climate or altitude.

I want poultry people to understand this: that I am always an inventor for **results** rather than a manufacturer for **profit**. Some incubator manufacturers never operated an incubator in their lives; others becloud their selling argument with various unimportant details, such as cheapness of price, fire-proof quality, etc.

Price doesn't count in a hatcher that is to be used year after year as a business proposition and a fire-proof incubator may or may not be the best hatcher. Beware of the one that does not prove **average results**. A hatcher can be at the same time scientifically accurate, safe to use, and moderate in price.

I do not intend to tell here about the whole scientific construction of incubators and brooders. This is gone over fully in detail in the catalogue of Mandy Lee Incubators and Brooders which we send free on request. It is sufficient to say that we have by no means the **largest** incubator factory in the world. We have only a limited capacity and are able always to sell all that we can make. We sell mostly to the **old hands** at the poultry business—those who have had experience and **know** how to judge for **results**. We do little business with amateurs or beginners because, with them, price and testimonial counts above all and of course one cannot compete in price with a heated box when one furnishes a scientifically-constructed and equipped machine that costs **twice** as much to build.

Of the half million incubators and brooders sold annually in the United States less than one-tenth are of actual or **permanent** value. The balance are toys, in use for the time being. I am not saying this to influence trade, because generally we have all we can supply, but I am writing in the interest of real poultry work.

Study carefully the real science of the subject. Don't jump at conclusions. Use common sense and, if you don't feel competent to decide for yourself, follow the advice of some one who has had **long** experience in the work. It will save you not only the expense of **first** investment but also much unnecessary trouble and worry.

*Yours truly,
Geo. H. Lee.*



Mandy Lee Automatic Moisture Pan

An important improvement on our late model incubator.
Fully described in catalog.

Lee's Egg Maker

What it is!

UNLIKE other poultry foods (which are mostly ground grain, meal, shell and other ingredients of questionable value) Lee's Egg Maker is largely granulated blood (deodorized), the most highly concentrated form of meat food, one pound of which is equal to 16 pounds of fresh meat, and which has an actual tested protein feeding value in excess of 80 per cent.

There is not one ounce of bran, sand, shell or other cheap and worthless filler in our product. No other poultry food looks like it, smells like it, or resembles it in any way. Ours is specifically a **meat food** whose sole purpose is to supply those essential elements invariably deficient in other prepared poultry foods. Lee's Egg Maker is clean, wholesome, thoroughly sterilized, and absolutely free from maggots and other vermin so common to the ordinary commercial brands of meat food.

Lee's Egg Maker should be fed every month in the year to all penned-up poultry; to little chicks after they are 10 days old; to hens and pullets during the moulting season; and as an egg-producer during the winter months. Our guaranty is broad—the risk all ours—while the feeding cost (50 feeds for 1 cent) is so small as to be hardly noticeable.

Edgar Briggs, of New Rochelle, N. Y., author of "Profits in Poultry Keeping Solved," and one of the best authorities in the world on poultry feeding, in a letter dated January 14, 1908, said:

"I have been experimenting carefully with Lee's Egg Maker in place of Beef Scraps, and find it is giving me much better results in eggs, so much so that I intend to recommend it in the third edition of my book of five thousand copies which is now in the printer's hands, and add one chapter on this particular subject."

This testimonial was unsolicited. Mr. Briggs did not buy from us direct but from an eastern agency and until we received his letter we did not know he was using our product.

Lee's Egg Maker is good through and through. Not a stimulant in any sense of the word, but a preparation that is absolutely certain in results, and justifies the guarantee shown hereon and which goes with every package.

WE GUARANTEE

that no matter what you are feeding and regardless of the number of eggs you are getting at the present time, if Lee's Egg Maker is added to the daily ration—made a portion of it—the increased egg yield resulting therefrom will more than pay the cost of the Egg Maker, cost of labor required, and 100 per cent profit on said labor.



25-1b pail	. .	\$2.00
5 1/2-lb. pkg.	. .	.50
2 1/2-lb. pkg.	. .	.25

Lee's Egg Maker is the "different" kind.

In my opinion Lee's Egg Maker cannot be equaled as a poultry food.

WM. F. MUNRO,
Providence, R. I.

Lee's Egg Maker is the best poultry food I ever used. From my 80 hens I was not getting an egg until I commenced using your product, but since then the egg supply is splendid. Your poultry food seems to be entirely different from anything I ever used before and it does all and more than you claim for it.

WALTER A. TEMPLE,
Ithaca, Pennsylvania.

Have used Lee's Egg Maker on my little chicks for more than a year and it does them a world of good.

MRS. R. P. STARR,
Nowata, Oklahoma.

I have been feeding Lee's Egg Maker to my ten Silver Laced Wyandotte Pullets and get ten eggs every day.

EZRA HEALD,
West Branch, Ia.

I have been raising chickens for more than forty years but never obtained as many eggs at this time of the year as I have this fall. At present, November 30th, 75% of my hens are laying and I attribute these good results absolutely to the continued use of Lee's Egg Maker.

MRS. C. A. TANNER,
Hull, Illinois.

We recently gave your Egg Maker a thorough test on our choice thoroughbred White and Black Orpingtons and as a result we are satisfied that it stands without an equal in egg-making quality. We took six pullets and a cockerel and fed to them a tablespoonful of Lee's Egg Maker in a little mash every other morning and in less than two weeks their egg yield increased from one egg every other day to five eggs a day. We are now feeding Lee's Egg Maker continuously to our entire flock. This proves that Lee's Egg Maker can make thoroughbreds lay as well as common dunghills.

You are at liberty to use this testimonial in any way you wish or to refer any one to us who may doubt the value of your product.

J. H. DENCE & SON,
Gloversville, New York.

Lee's Egg Maker has proved especially satisfactory to me. I am getting 18 to 23 eggs every day from 35 dry-fed White Leghorns; this in January in an altitude of over 5000 feet; the same flock averaged 23 eggs a week for four weeks last summer and I was feeding your poultry food daily.

W. H. TOBEY,
Cananea, Sonora, Mexico.

I believe Lee's Egg Maker is the best thing I ever used for securing eggs during the winter months.

GILBERT MARKUSON,
Dresden, Kansas.

Your Egg Maker is certainly all right; we fed it continuously to our chickens until eggs came in abundance during the whole winter.

MRS. THOS A. WOLF,
Centre Valley, Pa.

Can You Beat It?

I am well-pleased with Lee's Egg Maker. My eggs for December cost me just 6½ cts. per dozen for feed; the average per hen was 16 3-10 eggs; cost of feed per month 10 cts. per hen. How was that for December record? I attribute it all to the use of your product.

D. H. HAMMONS,
Mgr. Ginn Ranch,
Highland, Cal.

Have used Lee's Egg Maker for the past three months on my Cornish fowls and the results have been wonderful both in increased health of the fowls and increased egg production as well.

H. C. HAYES,
Eureka, Ill.

Poultry raisers in our territory are satisfied of the value of Lee's Egg Maker. We just sold one customer six pails. She says it more than pays to feed your product.

PALMER BROS.,
Liberal, Mo.

I noticed a splendid increase in the egg production from my flock almost immediately after I began feeding Lee's Egg Maker.

ALBERT N. FOX,
Lowell, Massachusetts.

My shipment of Egg Maker came in a short time ago and I have made good use of it. Eggs are coming regularly now and my old stock is looking fine.

CHAS. I. ALLEN,
Waletown, B. C.

We have 100 hens and did not get an egg from them for five months. Then I began to feed Lee's Egg Maker and now we are getting more than four dozen eggs a day. It is needless to say that we consider it a wonderful food.

JAS. FOSSETT,
Mt. Airy, Maryland.

That's why the "Knowing ones" prefer it.

Mandy Lee Incubators and Brooders

MANDY LEE
Hygrometer

By GEO. H. LEE.



"Good in the shell," "stuck to the shell," etc., are the result of improper heat and "guess-work" in moisture. Where our Hygrometer is used and our directions followed these disagreeable features are almost entirely eliminated, the shell is properly rotted, and the chicks pop out perfectly clean.

Our Hygrometer was made for use in the Mandy Lee Incubator, but is adapted for use (with proper directions) in any incubator and in any locality.

Price each, \$2.50. Special discount in quantities.
We supply one of these instruments free with each Mandy Lee Incubator.

EXPERIENCED incubator operators recognize the importance of moisture properly applied and maintained during the period of the hatch. Incubator manufacturers recognize this fact also, and while they almost invariably give instructions for applying moisture, these instructions are vague and misleading, given at random, without considering climatic differences and with no scientific knowledge of the hygrometric problems that confront the incubator operator.

The general impression is that little if any supplied moisture is needed at the beginning of the hatch, but that much is necessary during the last few days of incubation. Our experiments prove that quite the opposite is true.

Before an accurate knowledge on this point could be obtained the problem confronting us was to secure an instrument that would accurately register the percentage of moisture while operating steadily for 21 days in incubator temperature of 102 to 105 degrees, and we found that of all the different styles of hygrometers obtainable not one could be used successfully in incubator work. We now have perfected a Hygrometer (or moisture gauge) suitable for incubator use (see illustration) which can always be depended upon to register accurately in a temperature of 102 to 105 degrees.

Mandy Lee Brooders

The idea of applying a soft, contact heat direct to the backs of the chicks was never incorporated into anything practical until we began the manufacture of the Mandy Lee, nor until that time had the correct principle of brooding been recognized, namely, that the little chick cannot comfortably breathe the same heat required for giving a comfortable warmth to its body. By our method each chick always gets just that amount of heat it desires—no more and no less—natural heat in a natural way, and always breathing fresh, pure air. It's Nature's method.

DIRECT CONTACT HEAT



THE MANDY LEE

Is the latest development of scientific incubation; the only incubator in which everything is measured and regulated; the only one in which there is no element of guesswork. We offer you a certainty; others a possibility. Which do you prefer?

See
That
Heater

Fireless Brooders

Require no artificial or lamp heat at any time or in any situation. Can be used either indoors or outdoors with equal success. Perforated-tube system of ventilation. (Same as in the Mandy Lee Incubators.) Perfect warmth regulation and distribution. Adjustable hover; double doors and rain-shield; storm and vermin-proof adjustable side ventilators for extra ventilation. No dirt; no smoke; no lamps to fill; no danger from fire. Chicks raised in Lee fireless brooders are healthier, stronger, and mature earlier than those raised by other methods.

Just Three Things

are required to make 90 per cent to 100 per cent hatches every time and in any season, climate, or altitude: **1st**, correct heat; **2nd**, correct moisture; **3rd**, correct ventilation. In other incubators it's mostly guesswork; in the Mandy Lee it's a scientific certainty. In other incubators conditions are right if you guess right; in the Mandy Lee they are right if you follow simple instructions.

Correct Heat means 103 degrees at the upper surface of each and every egg. Gradually increasing to 105 degrees during the last week.

Measured accurately with a Mandy Lee Thermometer, distributed by our patent perforated-tube system, and easily regulated within a variation of one-half degree. Most other incubators vary from 2 to 5 degrees.

Correct Moisture means 65 per cent at commencement of incubation, gradually decreasing to 50 per cent during 3rd week. Measured accurately with a Mandy Lee Hygrometer, the only instrument suited to incubator work and regulated within a variation of 2 or 3 per cent. Most other incubators vary from 20 to 50 per cent and with no measurement or regulation.

Correct Ventilation means a gradual change of air in the egg-chamber once every half-hour. Automatically regulated by simple adjustment of damper on heater. Some other incubators give a change of air every 5 minutes, causing a rapid draft; others change the air only once in 24 hours, with result that the air becomes foul or stagnant. It takes these three features—no more and no less—and they must be in perfect harmony and capable of separate regulation and control. Heat to develop the germ; Ventilation to purify the air of the egg-chamber; Moisture to assist in rotting the shell, to regulate the rate of evaporation from the egg substance, and to prevent the inner membrane from becoming tough. Some incubators may have one of these features in partial success, but only in the Mandy Lee are all three of these essentials combined and working in perfect harmony one with the other.

READ THIS.

Out of thirty hatches of probably 90 per cent (although sometimes more), we have had five strong, most vigorous stock of any one with hens or incubators. We consider the "Mandy Lee" the best incubator on the market, barring none.

We have had five of the "Mandy Lees" in operation right in our store, and aside from turning the eggs twice daily and refilling lamps, one every day, the rest of the business has been a pastime occupied by looking on. Louis A. Hart, Weatherford, Texas.



Top
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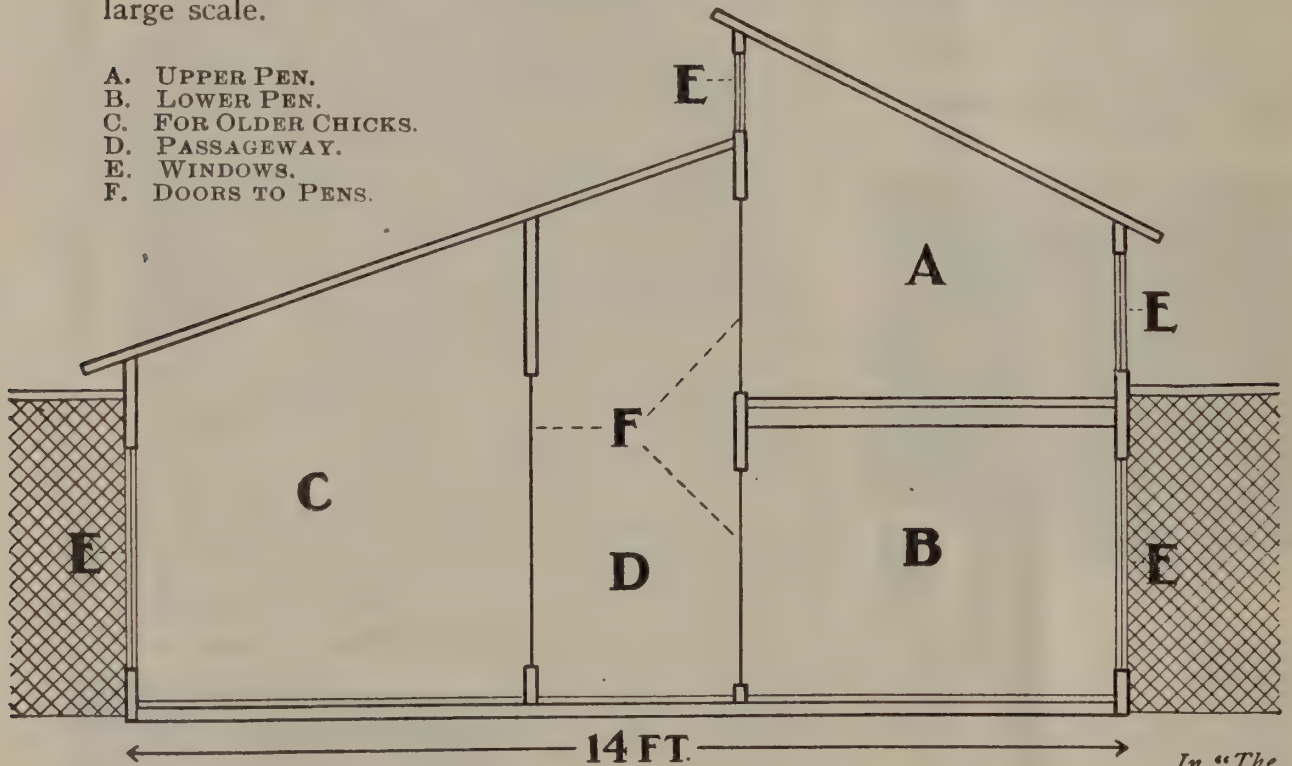
overs resemble a hen

Send for late Catalog Mandy Lee Incubators and Brooders.

The Brooder House

THE FIRST essential of a large and successful chicken farm is a good brooder house. A large plant may do without a Brooder House but it is seldom successful, and a successful plant may also do without a Brooder House but cannot be large. **Hatching and raising the chicks** is the great point in the poultry business and the rock on which most failures result. Raising is a good deal more important than hatching and while makeshift methods may answer with a hundred chicks, the best is none too good when operations are upon a large scale.

- A. UPPER PEN.
- B. LOWER PEN.
- C. FOR OLDER CHICKS.
- D. PASSAGEWAY.
- E. WINDOWS.
- F. DOORS TO PENS.



In "The Brooder House."

Correct brooding means proper warmth, with absence of crowding, and otherwise suitable conditions including proper food. Mandy Lee Brooders have been of such correct design and so satisfactory to all who have used them that about all we have had to work up during the past season has been **economy of room in the Brooder House**.

After careful study this seemed to be of more and more importance. We had been using a house 12x50 feet for **five** brooders. We designed a new system whereby a house 16x30 feet would accommodate **eighteen** brooders and, in case of necessity, could be made to hold **twenty-four**.

During all of one season a thorough trial was given to the Sectional Brooders of the Mandy Lee system with excellent results. Later on the new Fireless Brooders were brought out and used in the same house with even better results than with the heated brooders. An excellent plan is to use the heated brooders until chicks are a week or two old and then use the Fireless.

This house is double decked on one side of the passageway. A newly-hatched chick does not need from five to seven feet of space overhead. Three or four feet is enough—so with a ceiling seven feet from the floor there is plenty of room for two layers of brooders as indicated in the sketch accompanying this article.

This Brooder House may be made any length and divided into pens of any size. The width is preferably 14 feet; a house 50 feet in length may be divided into ten pens, which, multiplied by three, makes thirty pens in a house 14x50 feet.

One good stove will warm a house of this size in winter. For a house twice as long, two or three stoves will be needed, spaced at regular intervals.

Because some people say that chicks can be raised out-of-doors in zero weather in either heated or fireless brooders, don't believe that it is the best way. Chicks need warmth, not only while in the brooder but also while out feeding and exercising. They may **live** under other conditions but if expected to thrive and do well you must, for winter use, imitate summer conditions as nearly as possible.

The "LEE" Idea

refers to something besides poultry supplies—more especially to poultry culture. Mr. Lee is a poultryman in every sense of the word, not only manufacturer of the most popular line of poultry supplies, incubators and brooders, etc., that can be found anywhere, but also from the PRACTICAL point of view.

He has been "raising chickens" for a quarter of a century; practically the best part of his life has been devoted to this work.

His remedies, appliances, machines—all were devised to assist him in his work. He not only knew what was needed but had the ability to supply that deficiency and, besides the teachings of his own ACTUAL experience, his acquaintance with poultrymen ALL OVER THE WORLD has given him a knowledge of the needs of poultrymen that it would be almost impossible for anyone not similarly situated to acquire.

His knowledge—his experience—is at your command. He has assisted hundreds of poultrymen to success and is willing to help you. If your poultry are not doing well; if your work is not satisfactory, write "LEE"—his advice is free. He will gladly answer any questions, and his experience will be worth dollars to you.

Don't look for a "coupon"—we haven't any; don't believe in them. Just tell your troubles to us. Don't even enclose a stamp for reply. If we can help you we'll gladly do it; if not, we'll tell you so.



The following little Pointers are worth \$10.00 each to any one engaged in poultry work. They were learned in the hard school of experience and cost the writer much more than the above amount:

Water young chicks only twice or three times a day, especially during hot weather. Keep water from them at all other times.

Give Germozone twice-a-week in the drinking water to chickens young or old, sick or well. It is a bowel regulator.

Canker may be cured over night by carefully removing every part of the yellow coating and then applying full strength Germozone to the raw flesh. It is useless to apply medicine **on top** of the leathery canker.

Roup may likewise be cured in one or two nights. Roup is a cold in the head and a medicine must reach the **seat** of the trouble. Dilute Germozone injected into the passages of the head through the nostrils, eyes, and mouth, quickly effects a cure.

Poultry-houses hot in the day time and cold at night cause more sickness than any other one thing. Keep your poultry-house opened up well in the day time but close up tight at night. Avoid drafts but don't be afraid of wind blowing into the poultry-house in the day time. Keep the house dry and cool by day and warm at night.

Read liberally on poultry subjects but don't accept everything you read as gospel truth. Select the wheat from the chaff.

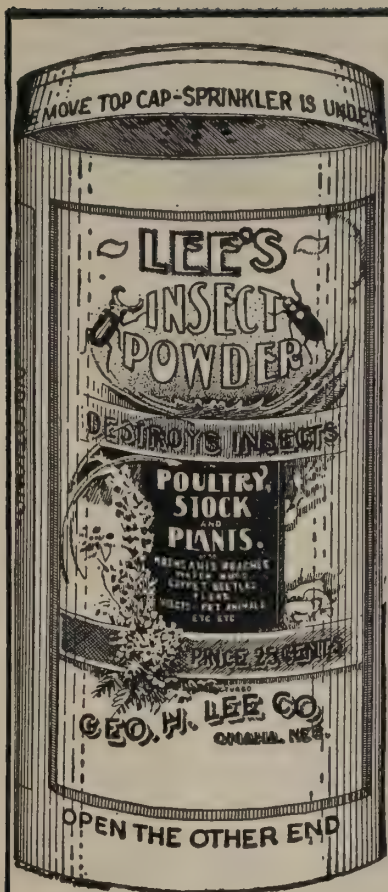
Select one good variety of poultry and stick to it, making yourself a head-liner or top-notcher in the breeding of the chosen kind.

The very first thing to teach a poultry attendant is to watch three things: First, the **droppings** of the chickens which should be firm and solid, slate color and tipped with white; if thin, soft, yellowish or green in color or otherwise than in the natural or normal condition, something is wrong and must be attended to or serious trouble may result. **Germozone** given **twice-a-week** in the drinking water regulates the bowels and prevents much illness.

Second: Watch about the roosts every day for signs of mites or other vermin. Close attention to this will not be necessary if **Lee's Lice Killer** is applied to the cracks and crevices of the roosts with reasonable frequency. It also prevents **Scaly Leg**.

Third: During changeable weather and especially fall, winter and early spring, observe carefully the head and beak of each chicken daily. If the nostrils appear dirty or if eyes or nostrils are watery or mattery, it must be given immediate attention as this is the starting point of the dreaded "**Roup**." It is well also to go through the chicken-house occasionally at night to see if any birds are wheezing or coughing. These should at once be located and removed for treatment.

Cold, damp, sunless quarters and musty or spoiled food cause much of the poultry troubles. Poultry-houses hot in the day time and cold at night, especially if damp, almost invariably create colds and Roup.



Lee's Insect Powder

is the round package in red and yellow—entirely different in appearance, and equally different in effectiveness from other insect poisons offered in powder form.

It isn't difficult to make a poison for insects. What requires skill and knowledge is in making a preparation that will actually destroy vermin on an animal and with no injury to the animal itself.

Herein is where Lee's product is different. Ours is thoroughly effective as a destroyer of vermin and absolutely harmless to the chick.

Watch for the yellow packages.

Prepared in large 1 1/4-lb. sprinkler-top cans and sells at

25 Cts. Each

postpaid for 40 cents.

Prepared especially for setting hens and little chicks, but also of great value for insects on plants and vegetables, and for moths, carpet-bettles and water-bugs.

Poultry Secrets

To Insure Fertility

To insure fertility in breeding pens a favorite plan (and in our opinion a good one) is to change cockerels about once each week. For instance, with three pens use four cockerels. Number your pens 1, 2 and 3; your cockerels 1, 2, 3 and 4. First week place cockerel No. 1 in first pen, No. 2 in second, and No. 3 in third; second week place No. 4 in first, No. 1 in second, etc. This method provides a different pen for each cockerel each week and also insures a week's rest period for each cockerel each month.

Don't Change Too Often

Avoid frequent changes in food ration. Adopt some certain system of feeding with as much of a variety as possible, and see that the foods are pure and wholesome.

Fowls should always have access to green food of some kind—cabbage, beets, turnips, etc.—but avoid feeding boiled vegetables as that has a tendency to overfatten them.

A laying hen must have plenty of water. It cannot be too fresh neither can the drinking vessels be too clean.

Yarding Preferable

Contrary to the general idea among poultrymen, for best results in egg production yarding is preferable to free range. This statement may surprise you, but it is a fact. Be sure that the yarded fowls are well cared for.

For Health and Vigor

If you want healthy, vigorous birds start at the beginning; exclude from the breeding pens all fowls that have ever been sick; give plenty of fresh air; don't breed from pullets; feed properly; keep pens and runways clean. That's the way—the only method we have ever known to be successful.

In Moulting Season

The moulting season usually extends thro a period of one hundred days, generally beginning early in August, altho the older fowls may not start to moult until September. Bill of fare at this season should be rich in nitrogen; sunflower seed and oil meal are both good. Provide an abundance of feather-making food. Separate the sexes at the beginning of the moult and do not remate until the first of the year.

Preserving Eggs

There is no better way of preserving eggs than by packing in salt. Eggs, however, should be fresh, and laid by unmated hens.

Winter Layers

It has been found that pullets or hens which begin laying in November usually make the most consistent layers during the balance of the winter.

Selecting the Layers

Many methods are advocated for selecting the layers, but the most reliable one is by the trap nest. This tells you accurately just what each hen is doing. Keep a record of eggs laid and breed only from the best layers. This plan followed consistently will insure, in a few years, a splendid lot of layers.

LEE'S "QUALITY" STRAIN OF SNOW- WHITE LEGHORNS



ILLUSTRATION shown here-on is a fairly accurate view of my favorite cockerel "Bob White," who was given first at the Trans-Mississippi Show, but later, on a contest and re-scoring, relegated to second place in favor of "George Jr.," a blood relation. There is a little story in connection with "George Jr." At the Trans-Mississippi Show of 1907-08 I hatched in the show room in Mandy Lee Incubators 300 chicks from my White Leghorn eggs and gave them away in lots of two and three on the last night of the show. Three of these chicks went to Mrs. Max Nippell, of Benson, Neb., wife of a prominent Omaha architect and poultry crank, a breeder of Rhode Island Reds. The three grew

and thrived and were named "George Jr.," "Martha," and "Mandy," after their growth had developed their sex, and when, in June, "Mandy" stole a nest, laid a clutch of eggs, and later became the fond mother of a dozen downy chicks they were the pride and joy of the Nippell family.

At the recent Trans-Mississippi Show (1908-1909) these three birds were entered for premiums by Mrs. Nippell in competition with 250 other Leghorns. On the awarding of prizes, "George Jr." was given fifth prize, but after the protest (not by Mrs. Nippell but by another person) and second award by another judge, "George Jr." was awarded first prize over my "Bob White."

I immediately offered Mrs. Nippell \$100 for "George Jr." which offer was accepted. "George Jr." is a splendid bird but, frankly, I wouldn't trade "Bob White" for five like him. They are both fine in shape and color and will head our two favorite yards, mated with females scoring 95 to 96½ points.

We will sell eggs from these two yards, only in case we have them to spare and for delivery to be booked well in advance, **\$5.00 per setting of 15 eggs.** No discount on quantity.

The lot of White Leghorn eggs that I bought from you sometime ago arrived O. K. and of the 100 which you sent me 97 of them tested fertile. From these 97 eggs I got more than 80 strong healthy chicks.

MRS. SYLVIA ROSE,
Cawker City, Kansas.



A Mandy Lee prize winning pullet.



TEN GREAT YARDS

Second only to our two yards headed by our peerless cockerels "George Jr." and "Bob White," we have

ten yards headed by such birds as "Jack," winner in first-prize pen; third-prize cockerel; fifth-prize cockerel; also all of the cocks heading our pens of last year which brought such birds as "Bob White,"

"George Jr.," "Mandy," and other first-prize winners of this season.

With these are mated hens and pullets of superior quality, the pick of our flock of 2,000 as fine White Leghorns as have ever been seen in the whole United States. Most of these females have never been in a show room but are fit to appear in any of the best and largest shows and in the strongest competition.

Eggs from these yards will be supplied until June 15th at \$2.00 per 15; \$10.00 per 100.

OUR WINNINGS

Trans-Mississippi Show, 1908-1909

PEKIN DUCKS

Cockerel—1st, 3rd, 4th and 5th.

Pullet—2nd, 3rd, 4th and 5th.

No old birds exhibited.

S. C. WHITE LEGHORNS.

Cockerel—1st, 2nd and 5th.

Pullet—1st and 2nd.

Hen—3rd and 4th.

Pen—1st, 3rd, 4th and 5th.

1st Gold Special for best Leghorns.

2nd Gold Special for largest display in Mediterranean class.

Silver Cup for best Leghorn male and female.

At the big Kansas City Show with only a few birds, tired and soiled from travel and long showing at Omaha, we won **six premiums on only eight entries**: two 2nds, one 3rd, two 4ths, and one 5th. No Pekin Ducks exhibited.

All of our winners were bred and raised on our own farm, "The Mandy Lee," at Florence, Neb., a suburb of Omaha.

Letters, inquiries and orders will receive most prompt attention if addressed to

GEO. H. LEE,
Omaha, Neb.

The White Leghorn eggs which I purchased from you on the 11th reached me in fine condition and are all that could be desired.

FRED H. PEARSON,
Richmond Beach, Wash.



Mandy Lee quality.



"Geo. Jr." when a promising youngster

TEN UTILITY YARDS

Never until this year have we sold an egg for less than \$2.00 per setting but our extensive trade on poultry supplies has made a demand for **utility stock**; that is, eggs from birds of purest blood and best egg capacity but not of show-bird value or special points of feather and form. For 1909 we have decided to mate up **ten utility yards** of one male and fifteen females each. These are

not culls; we sell all culls and inferior stock to market in June and none are retained that do not give promise of good value at maturity. Our utility yards are those that remain after culls are eliminated and our high-priced, fancy show-birds are selected for the best breeding pens. They are third choice from our flock of 2,000 purest bred White Leghorns and of superior laying quality. Our **BEST** pens are the choice of the more than 2,000 birds that we hatch every year—the ones we "show" during the winter season—Mandy Lee prize-winners; they are **OUR** idea of the best we have. The birds in the Utility yards are of exactly the same strain as our prize-winners, receive similar treatment, and eggs from these Utility yards will in all probability produce first-class stock. We do not believe there is another breeder in the United States offering, at these prices, stock of this quality.

Eggs from these matings are **\$1.00 per 15; \$6.00 per 100.**

On or about the 1st of January of each year we issue a mating list describing our breeding yards. We send a copy free to any one on request. At the present writing (March 1st, 1909) we have sold all the eggs we could possibly spare and have many orders booked a month or more ahead. With our large number of breeding yards we can always supply eggs very fresh often shipping them the following day after being laid.

After August 1st of each year we can supply either young or old stock at moderate prices—\$2.00 to \$5.00 each for males, and \$1.00 to \$3.00 each for females—all purest Leghorn stock and good breeders.

Each season we also have a few extra choice specimens to dispose of at from \$10.00 to \$25.00 each.

Get your breeding stock early. You can always buy better birds for less money in the fall.



*On the
Mandy Lee
Farm.*

The White Leghorn

THERE is an almost unlimited opportunity for exercising individual taste in size and color of chickens. They vary in size from Bantam to Cochin or Brahma, and in color from white, buff, red, black and brown to parti-colors of all hues. I would not detract from the good qualities of any other variety but from long experience and careful observation I have settled upon the splendid White Leghorn as my choice. I have watched it all up and down the Pacific Coast where countless thousands are raised and where scarcely any other variety can gain a foot-



*Snow
White
Beauties*

hold. I have visited the big egg-farms that supply Omaha, Chicago, Philadelphia, New York, and Boston, and everywhere it seems to be the White Leghorn that is doing the profitable business. Broilers are all right in theory but it is the layer that brings the profit. The White Leghorn is unquestionably the best and steadiest average layer. I have even had people write and ask me how to stop their breeders from laying in late fall and early winter so as to have them in better condition for spring breeding. One lady reported a valuable hen as laying 275 eggs within the year, and the 240-egg hen is by no means uncommon.

A hen that will shell out 20 dozen eggs in a year, worth an average of 40 cents per dozen, and \$2.00 to \$5.00 per setting during the breeding season, brings in an income of from \$8.00 to \$30.00 per year in eggs alone and surely such a hen is worth a goodly sum whether simply as a layer or as a breeder.

THE "LEE" SPRAYER

IS THE only sprayer of this kind on the market that will spray **entire** contents of can in any direction; the only one that throws a spray **directly upwards** as well as downwards. An invaluable feature and one that is sure to be appreciated by every user of a spray pump. It is made extra strong, heavily reinforced, and can be laid down without contents of can spilling.



Mfd. under patent of Jan. 17, 1899

It Sprays "Straight Up"

Price 50 cents

Postpaid, 60c

Especially adapted for spraying Lee's Lice Killer into the cracks and crevices of your poultry house, or for spraying bushes, plants, shrubbery, potato vines, etc.

EVERY POULTRY RAISER OR FARMER NEEDS ONE

THE LIGHTNING Whitewash Sprayer.

No. 28 is positively the most durable, serviceable, satisfactory low-price pump on the market.

Will fit any pail or bucket. This is the only spray pump that will properly spray **whitewash** without clogging. It will do much better work than can be done with a brush, especially on rough surface, as the force with which the material is applied causes it to penetrate the small crevices and openings, thus making a complete and perfect job.

It is constructed of heavy galvanized iron with **brass top and bottom**, a material that is not effected by the poisonous arsenites used in the different formulas for spraying fruit-trees, vines, and shrubbery.

It is made with a **large air-chamber** and has ball valves, the pressure being held in the air-chamber and on the nose, so that the nozzle throws a continuous spray and is not effected by the upward stroke.

Will throw a **continuous stream 35 feet high**, and is of especial value for washing buggies, windows extinguishing fires, sprinkling lawns, flowers, spraying trees, etc. The stirrup is steel, and the pump is provided with the best hose and **two nozzles**.

Price Complete, \$2.00

We Publish a Special Catalogue of Sprayers—Compressed Air, Barrel, Bucket, etc. Sent free on request.



LEE'S EGG RECORD.

SEPTEMBER				OCTOBER			NOVEMBER			DECEMBER		
DATE	PEN 1	PEN 2	PEN 3	PEN 1	PEN 2	PEN 3	PEN 1	PEN 2	PEN 3	PEN 1	PEN 2	PEN 3
1												
2												
3												
4												
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30												
31												
Total												

KNOW YOUR BIRDS.

LEARN THE POINTS.



(A)—Comb; (B)—Face; (C)—Wattles; (D)—Ear Lobes; (E)—Hackle; (F)—Breast; (G)—Back; (H)—Saddle; (I)—Saddle Feathers; (J)—Sickles; (K)—Tail Coverts; (L)—Main Tail Feathers; (M)—Wing Bow; (N)—Wing Bar; (O)—Wing Bay; (P)—Wing Butts; (Q)—Breast Bone; (R)—Thighs; (S)—Hocks; (T)—Shanks; (U)—Spurs; (V)—Toes.

HATCHING TABLE.

Chickens.....	21 days
Ducks	28 "
Turkeys	28 "
Geese.....	30 "
Pheasants.....	25 "
Guinea Hens	25 "
Partridges	24 "

EXPLANATION OF TERMS.

Clutch—A setting of eggs or brood of chickens.
Cockerel—A young male.
Crest—A tuft of feathers on the head.
Cushion—The feathers which surround the tail in Asiatic breeds.
Deaf Ears—The ear lobes.
Dubbing—The removing of the comb and wattles.
Face—The bare part around the eyes.
Flights—The long quill feathers of the wing.
Fluff—The soft feathering below the tail.
Furnished—A bird is said to be furnished when it is fully developed in plumage and body.
Gills—The wattles.
Hackles—The long narrow feathers on the neck.
Hen Feathered—A male bird is so described when he has the plumage of the female.
Hock—The second joint from the ground, intermediate between the foot and thigh.
Keel—The breast bone.
Mossy—Clouded markings.
Pea Comb—A triple comb.
Penciling—The narrow markings round or on a feather.
Primaries—The colored feathers on the wing which are concealed when it is closed.
Pullet—A young female bird.
Saddle—The short feathers on the back next the tail.
Secondaries—The hard feathers in the wing which show when it is closed.
Shafts—The quill of a feather.
Shank—The part of the leg between the foot and the hock.
Sickles—The long curved feathers in the male bird's tail.
Spangling—The dark spots on the feathers of certain breeds.
Squirrel Tail—A tail that is carried too much over the back.
Tail Coverts—The short feathers at the sides of the tail.
Vulture Hocks—Hard feathers attached to the hocks.
Wing Bar—The dark lines across the wings of certain breeds.
Wing Bow—The top part of the wing.
Wing Butts—The end of the wing.

Line Breeding.

Like begets like. A good strain can best be perpetuated and improved by an intelligent system of line breeding. Study the chart. Be sure and begin with strong, vigorous birds—those that have not been too closely bred.

Begin at the top. Note that the male is always represented by a solid line, the female by a dotted line.

Each circle represents the progeny, viz.:

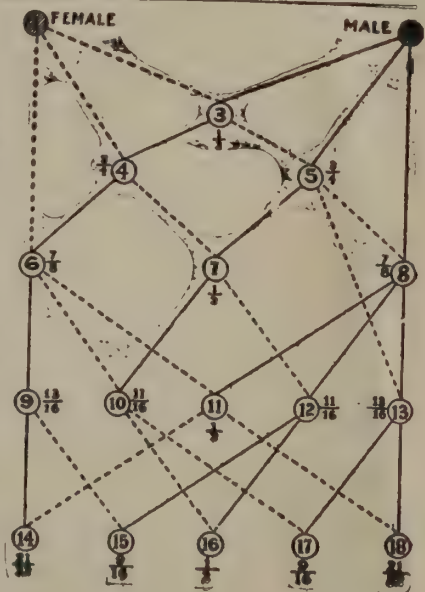
No. 1 mated to No. 2 produces group No. 3 which is one-half the blood of sire and dam.

A male from group No. 3 mated back to his own dam (No. 1) produces group No. 4, which is $\frac{3}{4}$ the blood of the dam (No. 1) and $\frac{1}{4}$ the blood of the sire (No. 2).

The fractions illustrate relationship between new groups and the original birds.

Follow this plan on down and we have in No. 16 the new strain, and in No. 18 the strain of our original sire No. 2, thus giving us 3 distinct strains, and by this system we may go on breeding indefinitely.

STUDY THE CHART.



DISEASES AND REMEDIES.

NAME.	SYMPTOMS.	CAUSE.	REMEDY.
Watery Eyes or Nostrils.	Mucus or water coming from eyes or nostrils. This is the commencement of Roup.	Drafts, extreme change of temperature between night and day. Dampness in poultry-house.	Remove the cause. Give Germozone in drinking water.
Swelled Eyes or Head.	This is later stage of previous disease.	Same as above. Neglected.	Same as above. Also dip heads of fowls in strong solution of Germozone.
Roup.	A still later stage. Mucus or pus forms in eyes and nostrils, offensive in odor.	Same as above. Neglected. Improper food. Lack of grit.	Same as above. Feed stimulating, nourishing food. Separate sick ones.
Canker.	Yellow coating on tongue, windpipe or throat. Similar to diphtheria.	Same as above, or contagion from other infected fowls.	Remove canker; apply Germozone full strength. Give Germozone in drink.
Inflamed Throat.	As stated.	Same as above.	Germozone in drinking water.
Bronchitis.	Wheezing or cough.	Same as above.	Germozone in drink. Stimulating food. Plenty of Cayenne pepper in feed.
Consumption.	Last stages of colds or roup.	Same as above.	No cure.
Bowel Complaint.	Green, yellow, or watery discharge from bowels. Healthy droppings are dark or slate color; solid, tipped with white.	Improper food. Neglect. Lack of grit or green food. Too much or too little brooder heat. Impure vessels or drinking water.	Germozone in all drinking water until disease is checked.
Indigestion.	General indisposition. Bowel trouble, enlarged liver, etc.	Overfeeding or improper food. Lack of grit, green food or exercise.	Cut down the feed. If necessary don't feed at all for several days. Enforce exercise.
Liver Complaint or Enlarged Liver.	Same as above.	Same as above.	Same as above. No cure in last stages. (
Vertigo.	Dizziness.	Same as above.	Same as above.
Apoplexy.	Sudden death; fowls found dead; fall off roost.	Same as above.	No remedy.
Weak Back or Legs.	Difficult to stand or walk.	Too rapid growth. Improper food. Rheumatism.	Nourishing and stimulating food. Lee's Egg Maker and Chick Grower with Cayenne pepper and green food, cabbage, etc.
Crop Bound.	Full crop in early morning. Rapidly emaciated body.	Stoppage of passage from crop to gizzard. Large chunks of meat, bacon rinds, etc., often cause this.	A dose of castor oil will sometimes remove the obstruction. If not an operation is necessary to open crop and remove it.
Bumble Foot.	Sores on bottom of feet.	Generally an injury to feet of heavy fowls caused by jumping down on hard floor from high perches.	Open the sore, remove pus, and anoint with Germozone until healed. Remove cause.
Chicken Pox.	Sores on face, comb, or wattles.	Contagion.	Anoint spots frequently with full strength Germozone.
Frosted Comb or Wattles.	Swelled, inflamed, or darkened comb or wattles.	Improper housing in cold weather.	Apply Germozone twice a day to affected parts.
Scaly Leg.	Rough scales or scurf on leg.	An insect that burrows in the leg under scale.	Use Lee's Lice Killer on roosts or perches. Apply the Lice Killer directly to the leg except to feather-legged fowls.
Loss of Feathers.	As indicated.	Skin disease. Feather pulling and eating caused by lack of meat food.	If skin disease, apply Germozone diluted. If pulling by other fowls, discover and remove them.

Prevention is Better than a Cure.—Use GERMOZONE as a Preventive.

Lee's Hog Remedy

What it Contains

Sodium Bicarbonate	Charcoal
Sodium Hyposulphite	Tobacco
Sodium Chloride	Areca Nut
Sodium Sulphate	Naphthalin
Antimony, Needle (pure)	Iron Sulphate
Sulphur	Copper Sulphate (small)

No meal of any kind; no refuse; no ash; no dried blood



LEE'S HOG REMEDY is a thorough mixture of the two best remedies ever offered to swine breeders—**Government Hog Remedy** (correctly prepared) and **Lee's Worm Powder**. If the hogs have no worms, the worm powder does not detract from the other portion of the compound but aids in destroying disease germs. If the hogs have worms the worms must be destroyed before a **permanent** cure can be effected.

Lee's Hog Remedy is the **best and cheapest remedy in the world for hogs**. It is a conditioner, a sure worm destroyer, an appetizer, a laxative, and cure for constipation. It keeps the bowels open, the digestive organs in good condition. An excellent preventive and undoubtedly the **best** cure for cholera. **All medicine**, undiluted with meal, it is easily the best and most popular hog medicine on the market.

Don't take chances. An ounce of prevention is worth a pound of cure. Feed **now** as a preventive, rather than later as a cure.

25-lb. pail.....\$2.00
100-lb. box.....6.00

Have used Lee's Hog Remedy for more than three years and have come to the conclusion that we can't raise profitable hogs without it. Whenever we try to get along without your medicine the worms get in their work and we lose over twice what the remedy would cost.
S. M. Baughman & Son, Dunlap, Iowa.

Lee's Hog Remedy is fine. My hogs were in bad shape, but after a few feeds of your medicine they are in best of condition.
O. W. Cliett, Martindale, Texas.

I can't raise hogs without Lee's Hog Remedy.
A. B. Shaner, Lanark, Illinois.

Chas. Joiner of Humboldt, Iowa, says that in less than two years Lee's Hog Remedy has saved him more than \$1,000.00 worth of hogs.

I have fed Lee's Hog Remedy for years and have not lost a hog since I commenced feeding it.—James Howe, Coatesville, Mo.

I lost more than 40 head of hogs about two months ago, from cholera, but have not lost one since I began feeding Lee's Hog Remedy.
G. B. Stackhouse, Millins, S. C.

Lee's Hog Remedy is the best hog medicine I have ever used and only costs about half as much as others.—Jas. Howe, Nemaha, Ia.

Lee's Dip is a coal-tar product and leads all others in the four principal points of dip excellency—purity, strength, solubility, and uniformity. Send for circulars.

PRICES: Gallon, \$1.25; Half-Gallon, 75 cents.

(SPECIAL PRICES IN BARREL LOTS.)

Lee's Stock Tonic



Strengthens, invigorates and builds up the system. It increases the flow of saliva, thereby making the digestion more natural, more perfect. It saves practically all of what otherwise would be a total loss and turns it into money for you.

Judicious use of Lee's Stock Tonic will eliminate practically all danger from the "forcing" process; keep your stock healthy; save the waste, thereby increasing the feeding value of the regular food ration and reducing its cost thereby, and prove profitable in every way.

Lee's Stock Tonic is not only an excellent article but the cost is ridiculously low. Five doses for one cent means that the saving of waste in the feedyard for a few days will pay the cost of using our product for the entire season.

By judicious use of Lee's Stock Tonic you can reduce the feeding period at least one-third.

Take your pencil and figure what that means.

Your cattle will make a larger gain, a better finish; hogs that get it will grow more pounds out of a bushel of corn and at less cost; brood sows will farrow better, litters will be larger and pigs will be healthier and thrifter in every way. It will make money everywhere you feed it.

Every dollar put into Lee's Stock Tonic will bring back more dollars in increased weight and better condition of the stock. It makes palatable food out of poor food, fattening material out of what has heretofore been waste product.

To the dairyman Lee's Stock Tonic has especial value. It keeps the bowels in good condition, the digestive organs unimpaired—the animal "up and coming" all the time.

Test it on one cow; note her production now and after two weeks use make the comparison. You'll find she gives better milk and more of it than formerly.

If you are milking twenty cows take half of them and make the same test. Mix Lee's Stock Tonic in their regular food ration for two weeks; then compare quality and quantity of milk received from them with what has been received from the other ten during the same period.

Lee's Stock Tonic should be mixed with the daily ration—made a part of it—and it won't cost over 10 cents a month. Give it to every cow, sheep, hog or horse with equal profit. It keeps them healthy and insures the bright eye and silken coat that is so desirable.

Don't be satisfied with the "just as good" kind that nets the dealer a big profit and won't give results. You can't buy another article as good at an equal price, nor one that is better at any price. Insist on getting Lee's. Absolutely guaranteed.

7-lb., 50c; 12-lb., 75c; 25-lb., \$1.45; 100-lb., \$5.00

SOMETIMES a good, reliable condition powder is desirable, especially for horses, colts, calves and sheep. There is more actual medicinal value in one pound of than in six pounds of any other stock food or condition powder in existence. It is a corrective of stomach, liver and bowel disorders, the result of a life study of veterinary remedies.

Lee's Best Conditioner

1-lb. pkg., 25c; 7½-lb. pkg., 75c; 25-lb. pail, \$2.50

Flyo-Curo

is a liquid preparation for coating the surface of the hair of horses, cattle and other domestic animals, to protect them from the buzzing, biting, annoying insect pests that make life a burden to these animals during the summer and fall. When applied by the means of the LEE SPRAY PUMP (see page 2) the work is very quickly done; it requires not more than a minute or two to apply it all over an animal, and the cost is not more than ½ to 1 cent per head per day. A COW WILL GIVE DOUBLE THE QUANTITY OF MILK; a horse will do more work and keep in better condition on less feed if protected from insects. It is not merely the protection of the dumb animals from the unendurable torments of flies and mosquitoes, but it is money in your pocket—the extra production you will get from a CONTENTED COW, the extra work your horses will do for you when not tormented by insect pests, the saving in feed the animals consume, will pay, many times over, for the use of this remedy.

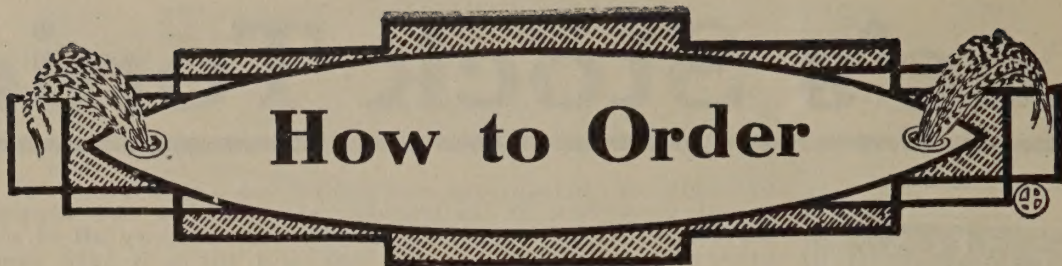


[BEFORE]



[AFTER]

Price—35c, 60c and \$1.00



Lee's Poultry and Stock Supplies are on sale all over the United States — agencies in every state and in some states in almost every town. In case we have no agency in your particular territory, send your order **direct** to us and we will give it immediate attention, either by referring to a nearby agency or will ship direct from our factory, whichever in our opinion will be the best for you.

All remittances should be made by money-order, check, or bank draft.

Write your name and address—state, county, city (and street number), also rural route (if any), distinctly. Avoid abbreviations; give name of railroad and express office if different from postoffice address.

We pay freight on shipments amounting to \$4.00 or more at regular catalog price.

We pay express charges on one gallon of Lee's Lice Killer at \$1.25.

Germozone (in tablet form) can be sent by mail, postpaid, on receipt of price.

Egg Maker, Insect Powder, and other package goods, are more bulky, and postage or express charges must be considered **in addition** to regular catalog price.

We have a special catalog showing Incubators and Brooders; also one showing Sprayers, Leg Bands, Poultry Markers, etc. If interested, we will be pleased to mail same to you.

We want an agent in every town, and if not already represented in your locality will pay liberally for your assistance in placing our goods there. **Write for our special offer.**

Our goods are leaders; every article **absolutely guaranteed**. Take no substitute; insist on getting the best—Lee's.

Address all orders and correspondence to

GEO. H. LEE CO.,
Omaha, Nebraska.

